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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,399	02/10/2004	Patrick N. Hopkins	DP-310788	8869

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/775,399

Applicant(s)

HOPKINS ET AL.

Examiner

Lan Nguyen

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/11/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Takano et al.

Re: claim 1, Takano et al. show a hydraulic mount in figure 4B, as in the present invention, comprising: a body 24 having a first fluid chamber 32B and a second fluid chamber 32A; and a decoupler sub-assembly 101, 102, 103 interposed between and partially defining the first and second fluid chambers, the decoupler sub-assembly comprising first 102 and second 101 flexible decoupler members operatively sealed together to form a third fluid chamber, as shown and described in column 5, lines 1-16.

Re: claim 2, Takano shows the decoupler sub-assembly comprises a perforated plate 103 interposed between the first member 102 and second member 101.

Re: claim 4, Takano shows a first fluid, electro-rheological fluid, in first and second chambers. Takano is silent of a fluid in the third chamber. Column 5, lines 1-16 shows that plate 103 is spaced from rubber members 101, 102. Hence, there inherently is a second fluid in the third chamber for plate 103 to move. If there were no fluid in the

Art Unit: 3683

third chamber, i.e. vacuum state, plate 103 and members 101, 102 would be pressed tightly together due to fluid pressure from first and second chambers.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano et al.

Re: claim 11, Takano et al. show a decoupler sub-assembly for a hydraulic mount, as in the present invention, comprising: first 102 and second 101 flexible decoupler members operatively sealed together to form a fluid chamber; a perforated plate 103 interposed between the first and second decoupler members in the fluid chamber; and a fluid located in the fluid chamber. Takano is silent of the type of fluid used in the third chamber. Figures 14 and 15 of Takano teach the use of an oil, i.e. hydraulic fluid, in the first 130B and second 130A chambers and an electro-rheological fluid in the third chamber 148 as one of an alternative designs while other embodiments such as figure 4B uses an electro-rheological fluid in the first and second chambers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have deduced that the fluid for use in the third chamber of figure 4B would be a

Art Unit: 3683

hydraulic fluid since the structures and operations of figure 4B and figure 14 are substantially the same except for the opposite usage of the fluids.

Re: claim 12, Takano further shows passage 42, 44.

Re: claims 14 and 16, figure 4B of Takano shows the perforated plate 103 is spaced apart from members 101 and 102.

Re: claim 15, figure 4B of Takano shows plate 103 with holes.

5. Claims 3, 5-10, 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano et al. in view of Baudendistel et al. (USP 6,412,761 B1).

Re: claims 3 and 5, Takano's mount, as rejected in claims 1 and 4, respectively, uses an electro-rheological fluid in the first and second chambers 32B, 32A and electrodes 46, 48 while claims 3 and 5 requires a magneto-rheological fluid and a coil. Baudendistel et al. teach the use of a magneto-rheological fluid 72 and a coil 40 in an engine mount. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Takano's mount to use a magneto-rheological fluid and a coil as taught by Baudendistel; since the use of an electro-rheological fluid with electrodes and the use of a magneto-rheological fluid with a coil are considered equal alternative working fluids and actuators in the art of dynamic dampening.

Re: claims 6 and 17, Takano is silent of the type of fluid used in the third chamber, as mentioned in the rejection of claims 4 and 11, respectively. Figures 14 and 15 of Takano teach the use of oil in the first 130B and second 130A chambers and an electro-rheological fluid in the third chamber 148 as one of an alternative design while other embodiments such as figure 4B uses an electro-rheological fluid in the first and

Art Unit: 3683

second chambers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have deduced that the fluid for use in the third chamber of figure 4B would be oil since the structures and operations of figure 4B and figure 14 are substantially the same except for the opposite usage of the fluids. Baudendistel teaches an old and well-known oil for use in engine mounts, glycol. It would have been further obvious to one of ordinary skill in the art at the time the invention was made to have employed glycol as an oil for use in Takano's mount since glycol is an old and well-known oil for use in engine mounts as taught by Baudendistel, and would have been economical and readily available.

Re: claim 7, Takano et al. show a hydraulic mount, in figure 4B, as in the present invention, comprising: a body 24 having a first fluid chamber 32B and a second fluid chamber 32A; an electro-rheological fluid located in the first and second fluid chambers; and a decoupler sub-assembly 101, 102, 103 interposed between and partially defining the first and second fluid chambers, the decoupler sub-assembly comprising: first 102 and second 101 flexible decoupler members operatively sealed together to form a third fluid chamber; a perforated plate 103 interposed between the first and second decoupler members in the third fluid chamber; a passage 42, 44 in fluid communication with the first fluid chamber and the second fluid chamber such that the electro-rheological fluid can pass between the first and second fluid chambers; an electrode 46, 48 that is operable to produce an electric field across the passage when energized; and a fluid located in the third fluid chamber. Takano lacks the magneto-rheological fluid for the first and second chambers, a coil and a hydraulic fluid for the third chamber.

Art Unit: 3683

Takano is silent of the type of fluid used in the third chamber. Figures 14 and 15 of Takano teach the use of an oil, i.e. hydraulic fluid, in the first 130B and second 130A chambers and an electro-rheological fluid in the third chamber 148 as one of an alternative designs while other embodiments such as figure 4B uses an electro-rheological fluid in the first and second chambers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have deduced that the fluid for use in the third chamber of figure 4B would be a hydraulic fluid since the structures and operations of figure 4B and figure 14 are substantially the same except for the opposite usage of the fluids. Baudendistel et al. teach the use of a magneto-rheological fluid 72 and a coil 40 in an engine mount. It would have been further obvious to one of ordinary skill in the art at the time the invention was made to have modified Takano's mount to use a magneto-rheological fluid and a coil as taught by Baudendistel; since the use of an electro-rheological fluid with electrodes and the use of a magneto-rheological fluid with a coil are considered equal alternative working fluids and actuators in the art of dynamic dampening.

Re: claims 8 and 10, figure 4B of Takano shows the perforated plate 103 is spaced apart from members 101 and 102.

Re: claim 9, figure 4B of Takano shows plate 103 with holes.

Re: claim 13, Takano's mount, as rejected in claim 11, uses an electro-rheological fluid and electrodes 46, 48 while claim 13 requires a coil. Baudendistel et al. teach the use of a magneto-rheological fluid 72 and a coil 40 in an engine mount. It would have been obvious to one of ordinary skill in the art at the time the invention was

Art Unit: 3683

made to have modified Takano's mount to use a magneto-rheological fluid and a coil as taught by Baudendistel; since the use of an electro-rheological fluid with electrodes and the use of a magneto-rheological fluid with a coil are considered equal alternative working fluids and actuators in the art of dynamic dampening.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kojima shows another decoupler. Hodgson et al. show another engine mount.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is 703-308-8347. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/775,399

Page 8

Art Unit: 3683

Lan Nguyen
Patent Examiner
Art Unit 3683

Lan Nguyen

3/2/05